Banking Crisis in Sweden and Denmark

and governmental interventions



Acknowledgments Special thanks to Professor Klas Fregert of Economics department in Lund School of Economics and Management. His passion in the subject of Macroeconomics was easily transmitted to us students, and reading his articles on Swedish banking history ignited the interest for subject of this thesis. His style of teaching and writing makes the subject of Economics less abstract and more tangible.

Abstract

Crisis in the financial sector have come to be a natural part of the economic cycles, as well as the compulsory regulatory measures that follow. These processes have been documented since the beginning of financial revolutions where the states and financial institutions are intertwined in an eternal dance ever since. Both external chocks and internal innovations can spark booms or busts. But how much should the governments be involved in the private sector and who benefits from the regulations? At least one theory, The Theory of Economic Regulation, is sceptic of a wider public having interest in these regulations. The reasoning being that only larger companies start the process of regulatory frameworks, all in their own interest. Au contraire points other researches to, meaning that these regulations have always been in the interest of the general public and are essential as shock-absorbers in the volatile modern economies. Two highly comparable Nordic countries of Sweden and Denmark, with independent histories of market economy come under the investigation. Material comes from empirical data and evidence in a multiple case study from nineteenth, twentieth and twenty-first centuries. Despite a varied degree of political involvement seen in these cases, the measures taken are very similar and with comparable end results.

Key words: Banking crisis Denmark, Banking crisis Sweden, Theory of Economic Regulation, governmental intervention, regulations in financial sector, history of banking.

Word count: 9.994

Table of contents

1.	Introduction	1
	1.1. Research question	2
	1.2. Hypothesis	2
2.	Theoretical framework	3
	2.1. Theory	
3.	Methodology	6
	3.1. Material	6
	3.2. Definition of banking crisis	7
4.	Empirical study	8
	4.1. Banking in Sweden and Denmark through history	8
	4.1.1. Establishment of Swedish banks	8
	4.1.2. The Swedish Centralbank, Riksbanken	11
	4.1.3. Establishment of Danish banks	12
	4.1.4. The Danish Centralbank, Nationalbanken	12
5.	Analysis	14
	5.1. The Swedish and Danish banking crisis	17
	5.1.1. Banking crisis in Sweden, part I	
	5.1.2. Banking crisis in Sweden, part II	18
	5.1.3. Banking crisis in Denmark, part I	18
	5.1.4. Time of stability	
	5.1.5. Banking crisis in Denmark, part II	19
6.	Discussion	21
	6.1. The role of the state in both countries	21
7.	Conclusion	22
	7.1. Future research	23
	7.2. Epilogue	23
8	References	2.4

1. Introduction

Banking crisis has become an inevitable part of the cycles in economies since the advanced banking systems were introduced in nineteenth century. The impact of it on the economy is not negligible and calls for the attention of the governments. Actions taken by politician and governments to intervene have a long history. Not only have interventions not diminished with development of our free market systems but become ever more relevant with the global expansion and interconnectedness of financial systems.

We can agree that governments have learned of history and are capable of minimising effects of such crisis and eventually avoiding economic disasters of last century. But we also have to keep reminded these actions come with enormous public costs.

There is always the question of actors who benefit and those who are at loss after the dramatic changes imposed on a sector by lawmakers. Above all it is essential to have a debate about the relationship between bailouts by a government and the responsibility of the banks themselves. Simply put and in economic terms there is an aspect of moral hazard to be discussed whenever the banking system itself doesn't need to stand for the full consequences of its actions (Sjögren & Iversen, p.172). Both the objectives and operations of the government taking control of the situation and correcting market failures has to be discussed thoroughly. The governmental interventions in the banking sector have never been unconstrained, there has therefor been a need to analyse the motives behind the public policies established during and after banning crisis (Ibid., p.187)

The two Nordic countries of Sweden and Denmark have been chosen for the study of this paper. Despite differences in historical, contextual and political sense these countries have also many shared similarities, there-among transparency and a higher degree of financial stability.

The financial revolution that is closely related to early phases of capitalism in the nineteenth century is a time that stands out in the economic history of both countries. A time period where closer ties were established between the industries, the financial systems and the governments. Thereby a perfect time period to proceed from in this study. In current times both countries were hit by severe financial crisis, Sweden in the first half of 1990s and Denmark in the few years following 2008. The chocks induced to the economic system were similar but the political reactions of different character, not completely surprising following a path in each country's history (ibid., p.173).

Two completely distinguished eras in finance are presented here without any continuity, in order to avoid volatility in the empirical study by introducing too 11 many political and economical events, thus making a jump from 1920 to 1990s. The idea behind including historical events is that an economic historical approach can add new insight to the understanding of current processes.

1.1. Research question

'What are the mechanism of crisis in the financial markets, and what has been the reaction of regulators in Sweden and Denmark, differences, similarities and the motivation behind their incentives.'

1.2. Hypothesis

The main hypothesis of this thesis is that all kinds of governmental interventions affect market incentives as well as tax payers. An intervention needs to be both economically effective and democratically accepted and for that reason the support of the public is necessary. With explicit argumentation, short haul interventions and fast exit from interference with the private sector, the intentions of which actors the governmental actions benefit will not be dubious. Once the governmental operations are known to be successful and not only a financial burden for the tax payers, the confidence for these interventions will be restored and stable.

Prerequisites for a successful intervention must be strong institutions, higher degree of law enforcement, bankruptcy rules and not least transparency of policymaking. On the other hand if a society is burdened by political disputes, nepotism and corruption, they will all hinder an efficient and fast way out of the crisis.

With this hypothesis the Scandinavian countries have an advantage in successfully implementing governmental interventions in the cases of crisis management. There is also an advantage in the historical institutional pattern these countries have shown since early industrialism and the financial revolution when implementation of measures started taking place (Sjögren & Iversen p.171).

2. Theoretical framework

2.1. Theory

The preamble to Theory of Economic Regulation as formulated by George J. Stigler:

'The potential uses of public resources and powers to improve the economic status of economic groups (such as industries and occupations) are analyzed to provide a scheme of the <u>demand</u> for regulation. The characteristics of the political process which allow relatively small groups to obtain such regulation is then sketched to provide elements of a theory of <u>supply</u> of regulation.' (Stigler, p.3)

The outlook is one of the state being source of a great power, a power it can use to aid or to let down various industries. The main aim of this theory is to investigate which actors benefit from regulations and which ones are burdened by it. Further on the effects of said regulations are studied in allocation of resources in society. The main hypothesis of the theory is that regulations as a rule are pushed for by a certain industri for their own benefits.

Sigler puts forward that regulations of an industri are viewed in one of two ways. One view being that regulations are aimed for protection of the public in general or a larger group of society members, even regulations that seemingly injure the public conjure according to him an image of having a higher aim to protect the public as a community. The other view is sketched somewhat unclear as politics being non-rational and unpredictable combination of vastly different forces.

An illustration of how an industri can use politics for gaining dominance is how public resources are used for having control over entry of rivals in the specific industri. The theoretician points on the diligence a regulatory body can use to exercise its power of control over entry in any market.

The banking sector in USA is exemplified where the Federal Deposit Insurance Corporation efficiently uses its power of insuring new banks to hinder majority of new entries into the commercial banking segment.

In order to illustrate how an industri can take advantage of political systems for their own benefit, Stigler looks closer at the nature of a political process in a democracy. *Economic votes* in a market place happen when the consumer makes a choice, between f ex rail or air travel. The market is then responsible for collecting these votes, predicting their future outcome and investing according to that. The coercive nature of a political decision renders a different outcome, when f ex rail traveling receives subsidiaries, all consumers and non consumers are given the same proportion of decision making through their voting that does not correspond to their need or knowledge of air or rail travel. Thus political decision-makings about any market are not participation-based unlike the market voting.

'The expressions of preferences in voting will be less precise than the expressions of preferences in the marketplace because many uninformed people will be voting and affecting the decision.' (Stigler, p.11)

Subsequently according to Stigler's theory the regulator, being a governmental organ or commensurable is presented with pressure from consumers in the shape of electoral pressure as well as producers pushing for their special interests. Since the special interests are more persuasive, regulations are rarely passed for protection nor benefit of consumers thus benefiting larger firms.

The primary premisses for the theory are

- 1. The state has the fundamental power of forcing to oblige, those in control of this power benefit.
- 2. For self-interested actors costly efforts are done to seek the state's coercive power in their own interests.
- 3. Large firms, characterised by homogenous and small groupings can easily mobilise and surpass other groups faced with problems of collective action.
- 4. Consumers remain ignorant for rational reasons and small firms lack the potential to organise themselves and face lower payback for their action (Brown, 2005).

To illustrate numbers 2-4 in one scenario, the producer side, with a large stake is rationally informed (unlike the consumer) and targets the merited political actor for this cause. The collective diligent support comes as lobbying, financing political campaigns, promises of a high rank position in the politic afterlife etc (Peltzman, p.9).

Admittedly more than 50 years have passed since this pioneering take on public choice theory applied to regulatory agencies, a theory that has shown to have a durable impact.

2.1.1. Criticism

Stigler is said to have a biased outlook on the demand and supply side of the regulations, i.e. the producers and consumers are in focus, ignoring the motivation of the regulator or legislator. Even if he somewhat acknowledges political support aspects, he does however underestimate the power of customers in profiting from legislations (Peltzman, 2022).

Peltzman (1976, 2022) himself a student and colleague of Stigler's, has both argued and given a more realistic, updated view on this theory in several articles over the years. He even deems Stigler's theory as having an aim of being provocative.

In hindsight, with the immense increase in *social regulation* that was only under way when this theory was introduced, there are many examples that contradict Stigler according to Peltzman. Excellent examples such as the environmental regulations where we even can introduce the reverse theory of an industri created by regulators, f ex renewable energy, biofuels etc. Other examples include worker safety, security of pensions and consumer product

safety. He even suggests examples on industris being resistant to deregulations, such as the deregulations of securities brokerage in finance sector by late 1970s (Peltzman, p.10).

Another aspect of criticising the fundamentals of this theory touches upon the non-specified category of legislator. Only later research has discussed the fact that the regulators or law makers summed up as the state in this theory are a very wide group of actors with different interests and showing the importance of the intricate interaction between these actors themselves (Peltzman, 2022).

Not surprisingly Stigler's theory is sprung out of an American (USA) context. Which leaves much doubt as to what extend it can be applied in a Nordic context and in cases of Sweden and Denmark, where supporting political campaigns, lobbying and political after life in private sector are all either uncommon or under scrutiny. As Sjögren and Iversen argue, there are intrinsic principles and perceptions in every nation that can only be understood from a historical path dependency point of view rather than only economic theoretical analysis (Sjögren & Iversen, p.176).

3. Methodology

The research of this paper relies on a multiple case study, undertaken in a disciplined-configurative manner since it uses an established theory to examine the cases. The method itself is explanatory first and foremost and analytical within certain limitations.

A case study can be best defined as a single unit (a relatively bounded phenomenon) studied intensely in order to generalise across larger sets of units. In political science, case studies are common but with certain tradeoffs that are not within scoop of this study. The method is rather a way of defining cases than modelling casual relations or deeply analysing them (Gerring, p.342). Further on the study is understood as case study since the research behind it is characterised by process tracing (Georg & Bennet, 2004).

The research design is comparative-historical and mainly qualitative methods are used for the study, with reliance on quantitative studies in the secondary sources. The study is comparative in two dimensions, both in a hierarchical time series and in the objectives of two nations. A historical background to modern economies of two independent Nordic countries will be given as a backdrop to analysis that connects to the banking crisis of recent times to manifest that long-established institutional orders play a much grater role in the boundaries of a nation state. (Hannerz, 1996).

The hypothesis will be tested with the Theory of Economic Regulation by Stigler. Study with the selected theory was undertaken with regard to the simplicity of chosen theory and its challenging and to a degree provocative content. For this last reason a section is reserved for criticism and an independent case as an informal unit. Informal units consist of all other units than the intensively studied cases, brought into the analysis in a peripheral way (Gerring, p.344).

3.1. Material

Literature includes international research material and scientific journal articles originating in USA, Sweden and Denmark. Secondary data has been collected from reliable official sources.

3.2. Definition of banking crisis

Systemic banking crisis is signified by signs of financial distress in a major part of the banking system. These include bank runs, losses in the banking system and bank liquidations (Sjögren & Iversen, p.171).

STAGE 1

A normal business cycle starts with increasing demand for goods and services.

STAGE 2

Higher demand for financial capital in the non-financial sector, within existing institutions.

Organisational adaptation within the financial sector, integration of resources.

STAGE 3

Deregulation in combination with institutional inertia, causing institutional clash, potential systems risk. Either national or international origin.

STAGE 4

Financial innovations, more sophisticated markets, new types of finial actors, many of them less regulate and dependent on bank credits, higher levels of private risk capital.

STAGE 5

Debt gearing and financial fragility, high expectations of increasing markets values, idle capital, investments in 'false' innovations, speculation in peripheral

STAGE 6

Bubble burst. Price decline (disinflation or deflation), reduced value for financial assets, panic that leads to crash, bank run (financial distress).

STAGE 7

Intervention by the government (bad banks), central bank (lender of last resort) and private reconstructions, contraction of financial sector, credit crunch, higher bankruptcy rate, stricter laws and enforcement.

Figure 1. An illustration of banking crisis in several steps by Sjögren and Knutsen (2010)

4. Empirical study

4.1. Banking in Sweden and Denmark through history

The history of banking could be deducted from the old greek era or at least the banking system as we know it forming in renaissance Florence. The focus here will be on defining a start from the financial revolution in each country. For a real financial revolution to happen there has to be a relationship between the political arena, the state, and the financial one, the market. Another requirement is the establishment of a general financial system. For that reason the existens of well developed authoritative organisations and businesses that facilitate financial activity are key factors (Ögren, p.1).

With another objective, banks in both these countries developed in a secure and stable legal environment, a precondition for the development of a financial system. The Scandinavian legal system as preconditioning the right environment for financial institutions has been characterised as stable and independent of the state (Fregert, p.16). Independent legal system that is, not independent banks!

Despite the Nordic market economies being similar in character and well coordinated amongst one another, the role of the state has historically differed. In Sweden f ex the state have had an active part in the banking sector thorough ownership and partnership of political sphere and the industrial investments. While Denmark marked by a liberal market view have no experience of state ownership in banking sector (Fellman, Iversen, Sjögren, Thue, 2008).

Despite this fact, in the banking history of both countries it can be observed that regulatory regimes have been passed in accordance with the frequency of crisis. A first regulatory regime with the setting in the liberal era lasted from times of the financial revolution about 1850s until 1930s and was characterised by many banking crisis in Sweden as well as in Denmark. More restrictions followed only after that era in a hard regulatory regime that lasted well into second half of the twentieth century. A softer regulatory regime was next, with decreased restrictions but also marked by new era of globalisation, new international institutions and international regulatory frameworks such as Basel I-III (Sjögren & Iversen, p.173)

4.1.1. Establishment of Swedish banks

The completion of financial sector structure in Sweden took place in two periods. From 1772-1817 the Central bank of Sweden, *Riksbanken* acted as the lender and cashier in a system with many joint-stock, so called *diskonter* banks. These *diskonter* banks developed in several steps (Fregert , p.12). Succinctly, four categories of financial organisations ruled the Swedish credit market from 1830s

until beginning of twentieth century; The national bank, the mortgage institutes, the commercial banks and the saving banks.

A National Debt Office, *Riksgäldskontoret* (comparable to treasury) was introduced in 1789. They issued bonds with specific denomination, used by public as an standardised currency that rivalled the national currency *Riksdaler* (Riksbanken, 2018).

The political aspects of *Riksbanken* and *Riksgäldskontoret* resulted eventually in the parliament's increased power over financial policy. The process had followed a reintroduction of autocracy in 1789 (the act of union and security) decreasing the parliament's power following coup d'état of 1772. Now the National Debt Office had the task of administrating a large national debt arising after the war against Russia 1788-90 resulting in scrutiny on its book keeping by the government which paved the way for resistance towards royal autocracy (Nyberg, p.27).

This first period of private banks in Sweden ended in 1817. A first private bank after this date was *Skånes Enskilda Bank* opening 1831 that came under the rules of the new bank law of 1824. This bank law declared that 'the state would not support any bank under any circumstances' (Fregert, p.28).

Second generation of private banks lasted from 1818-1870. A new form of thrift banks, *sparbanker*, were introduced in 1820s. In 1830s this development was followed by unlimited liability joint stock *Enskilda banker*, thereafter with bond based building associations, *Hypoteksföreningar* and in 1860s limited liability *Kreditaktiebolag was introduced*.

Finally a modern banking structure was in place by 1870, mainly due to underlying facts of stability in politics and during an enduring period of peace. The legal system also provided protection both for the formal and informal banking sectors, since there were both segments in Sweden of that time.

These changes were the result of several new constitutions which gave the government the right to conduct economic legislation and thereby charter banks, while the central bank, *Riksbanken* was placed under the parliament. A procedure that led to some tensions between different decision makers. (Fregert, p.14)

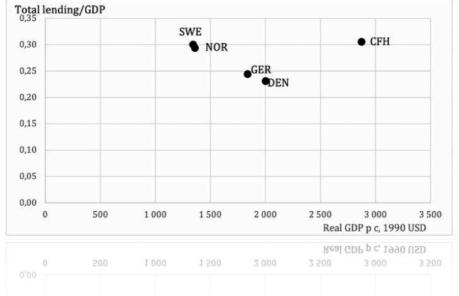
Another important aspect was that by codifying Commercial law, *Handelsbalken* of 1734, there was a ceiling set for lending rate at 5% or 6% which all institutions had to apply and it lasted until around 1860. The informal sector appears to have had generally higher interest rates (Ibid., p.16,20).

The years 1820-1870 are in Sweden considered to be the formative period for the country's modern banking system. Still in 1860 the informal sector of banking was estimated to be three times larger than the formal sector, whereas a rapid growth of the latter made them of equal seize by 1900. It was also first in 1860s that the banking system started playing a role in the industrialisation of the country (Fregert, p.13).

Private note issuing was common and accepted despite being depicted as violation against the ordinance of 1824. The reasoning behind was that the much needed banks had not enough supply of deposits from the public to be able to sustain their fundings, an early liquidity problem (Fregret, p.49). These notes were interchangeable and their convertibility forced by law after 1864. These notes

were inscribed: "[Name of bank] exchanges this note for [denomination] *Riksdaler* Banco" (Fregert, p.54). Eventually during the nineteenth century new ordinances restricted note issuing giving notes issued by *Riksbanken* an advantage as we have seen before (Fregert, p.51) (Larsson, p.173). By 1870 Sweden had reached a financial depth on level with the much richer country of Switzerland. As Sandberg puts it, Sweden was an 'Impoverished financial sophisticate' (Sandberg, p-650 - 680). At the same time the amount of banks had doubled in a matter of a decade making banks accessible on various geographical locations. Even the efficiency had increased in terms of the spread between lending and funding rates. The more competitive market, the lower the spread became (and thus lower profits for individual banks) (Fregert, p.71).

Figure 2. Financial institutional depth (Total lending/GDP) for five countries in 1870 and real GDP per capita.



Source: Fregert p. 70, built on Jordà et al (2016), www.macrohistory.net/data.

In the case of Sweden, two turning points in 1870s and 1890s have been significant for the acceleration of economic growth and modernisation, as a comparison a slower process than for example in England (Ögren, p.10).

By late nineteenth century and early twentieth Sweden had one of the largest foreign debts due to investments in infrastructure. The debt and need for new capital put a pressure on the financial system. An early version of the Swedish model emerged as the government and the private sector combined their resources in activities that could fund the projects of large scale in this intense phase of industrialisation (Larsson 2010, p.172). *Stadshypotekskassan*, the new mortgage institute for urban housing market mentioned before, was established as a result of special parliament committee involving representatives form Stockholm financial markets, there among Marcus Wallenberg of Stockholms Enskilda Bank. They presented a proposal for this new institution that the government accepted without major changes. Another fine example of government and private sector in

interplay. This presented an opportunity for the state to increase the capital base in the country.

As a result the increased demand for capital along with a fast growing capital market required targeting legislation. As a notion, up until late nineteenth century the financial market was signified by norms in traditional setting only in combination with official regulations (Larsson 2010, p.176).

Table 1. The Swedish formal credit market 1835-1910, market shares in procent

Year	Commercial banks	Savings banks	Mortgage institutes	The Riksbank	Others
1835	6	6	6	82	0
1840	16	8	21	49	6
1845	13	8	24	46	9
1850	16	11	33	35	5
1855	16	13	46	22	3
1860	24	12	38	18	8
1865	25	12	43	12	8
1870	29	14	38	10	9
1875	38	16	30	7	9
1880	35	14	35	8	8
1885	38	17	30	7	8
1890	36	19	29	7	9
1895	40	21	24	6	9
1900	50	18	17	6	9
1905	52	19	13	7	9
1910	54	19	13	5	9

Source: Nygren (1983), pp.37,49,60 and Nygren (1985), p.150.

4.1.2. The Swedish Centralbank, *Riksbanken*

Established in 1668 as the first central bank in the world (Riksbanken, 2018), the role of Riksbanken changed from granting subsidised credits to selected customers in first half of the nineteenth century to the monetary authority with responsibilities of providing Sweden with a stable currency and overlooking the entire financial system by early twentieth century, their function until this day (Ögren, p.91). The shift is reflected in table 1 above. Until then the industrialists and nobility had supported the private banks agency while farmers were loyal to Riksbanken. The private interests behind commercial banks was hindrance for the involvement of centralbank when crisis struck and this led to a 1897 legislation of *Riksdagslagen* (Riksbanken, 2018). Following this, in 1903 note issuance was monopolised by Riksbanken. These changes in legislation probably led to a reduction of longterm credits granted f ex building sector over the course of a few years, minimising risk (Larsson 2010, p.173).

4.1.3. Establishment of Danish banks

An economic boom in agriculture was followed by establishment of many joint-stock provincial banks in the period around 1850s, which signified by commercial banking system taking off in the country. Their collective aim was to promote commerce, industri and agriculture. In 1857 crisis put an end to new establishments until first half of 1870s when a new banking era began (Hansen, p.24).

The very liberal economic climate of Denmark up until first world war had allowed a favourable climate for operations of banks. Innovations in financial services such as checks, cash credits, branch- and investment banking could easily grow in such a climate. Although admittedly, lack of regulations worsened the case with banking crisis of 1877-78 and later on in early twentieth century. In 1919 a first commercial bank act was passed through. Unlike in Sweden a proposal on interest rate ceilings was rejected by the House of Lords in 1913 with the argument that 'money is an international good, the price of which is determined by the laws of supply and demand' (Ibid., p.21).

During first world war, deposits in Denmark gained rapidly and they made the country a creditor nation since at least three decades. The central bank's response was passivity in restraining the flow of liquidity. Money flowed from the provincial banks into the commercial banks in Copenhagen which initially led to increased lending of cash credits. By 1920 the winds of prosperity had changed and an international economic downturn spilled over in a decline of bank businesses (Ibid., p.29).

A rather dark period in Danish banking history occurred from 1920-32. The centralbank, *Nationalbanken* and the major banks with the aid of the state, liquidated or reconstructed 52 banks and a further 19 banks were forced to merge with others (Hansen 2010b, pp1-20).

Legislations in 1930 followed, severing the control mekanisms and by establishing a drafting committee that involved more actors such as bankers organisation and unions - thus making it more than a mere political case. Among others, regulations on liquidity and solvency of banks were made more rigorous by the upper mentioned legislation (Hansen, p.21).

As Hansen elaborates, a close correlation is easy to observe between crisis of past and prudential regulation in postum in the financial sector. One primary aim of these regulations was to limit information deficiency (as private customers did in comparison to businesses and merchant banks), meanwhile any attempts 'at limiting competition were defeated during legislative process' (Ibid, p.39).

4.1.4. The Danish Centralbank, *Nationalbanken*

The Danish Nationalbanken was established in 1818, and until 1845 the bank lent money to a certain degree. Even if its primary role was already that of stabilising Danish monetary system which had been severely destabilised after Napoleonic wars and following hyperinflation. *Nationalbanken* had since

monopoly over note issuance and in a few years the value of Danish Rix dollar was restored.

By the same time the bank's lending power was restricted as a consequence of shortage of reserves as backup. From 1860s the *Nationalbanken* was a full-fledged central bank, managing the monetary system as well as acting as bankers bank and the lender of last resort (Hansen, p.25).

Only between 1920-1932 Nationalbanken came to the rescue of 40 banks while 30 others were reconstructed or liquidated. Nationalbanken made sure to rescue the larger banks even in case of insolvency and not only when they were drawn by illiquidity. The Danish central bank also bought shares of the troubled banks in the market in an attempts to save the banks, upon managers having expressed their fears for bank-run if their share prices declined.

An interesting aspect is that the *Nationalbanken* at this point was a private joint-stock company, even though they acted as lender of the last resort and not only did mediate between larger banks and those smaller, they also had severe ties with the state and the state employed bank inspectors (Ibid.). As a comparison the Swedish centralbank gained independence from the governmental bodies only in 1993.

After 1924 *Nationalbanken* let deliberately two big banks to default, banks that few years earlier had been supported by *Nationalbanken*. The reason? Government and *Nationalbanken* had embarked on a policy of deflation in the country after emerging inflation and sinking exchange rate. Exquisitely put by the general manager of *Nationalbanken* as showcasing monetary policy making, the protection of production had been more important than the money until then but now the protection of money itself had foremost priority. For certain reasons personal and political perspectives did differ in this matter (Hansen, p.39).

5. Analysis

It is more common for an industri to resist new regulations than to search for them, as there is preference for the status quo and this preference is often shared by other interests in the political game. Investors often resist change (Peltzman, p. 17). To showcase regulatory changes and its consequences in financial markets we can find a goldmine in aftermath of the financial crises of 2008.

The Dodd-Frank act of 2010 helps illustrating the case of economic regulations. In the turmoil of finical crisis of 2008, the status quo of the financial sector as an industri was disturbed. The American government soon deemed some banks and other financial institutions as 'too big to fail', coming to their rescue with bailouts. It resulted in the congress taking action after demonstrations of public resentment and protests at large got combined with a deep desire to avoid future disasters of this format. Hence a multiple-chapter law was born, including provisions regulating the soundness of banks.

A new regulating institution, Financial Stability Oversight Council, was appointed. Their task being collaborating with domestic and international actors for averting future bank solvency and liquidity crisis. The behaviour of the Too Big to Fail banks as irresponsible had shown to be the cause of the massive systemic error. Following the acts of new legislations, banks got classified according to seize and importance where the larger banks went on being subjected for more scrutinised requirements of liquidity and capital reserve than those of smaller seizes. A special institution, GSIFI, was formed to observe banks globally, in corporation with the newly formed American example Systematically Important Financial Institution, SIFI. Except for highest capital and liquidity requirements these larger banks were subjected to annual stress tests. An interesting fact to observe is that in the American group four major banks participated, whereof two were bailed out themselves by the government during the financial crisis.

That said, these regulatory scrutinies were not welcomed by the *Too Big to Fail* banks, nor of their stockholders. A big part of value of their stocks was erased as a bi-product of this new act. But, as Peltzman suggets, the contemporary policymakers have a different take with their legislations where the implementation is mainly left to the end regulator in its details. This being one of the reason the stocks prices bouncing back eventually (Peltzman, p.17). A skeptic view is in order though since during this long observation time many other factors than regulations were at work effecting prices of finial instruments.

The final implication here is that the industri might initially resist regulation due to benefits of status quo, but that the positive aspects of regulations for the industry itself emerges with time. Their influential capital will for example remain powerful despite the subjects and players having changed. The new ambience will once again leave out unorganised, ignorant by rationality interests. More regulations also usually mean less competition in the market as Peltzman argues, which is preferable by the big actors already established on the field (ibid.).

The advantage that is given to the incumbents in the industri manifests itself in a revolving door principle, where regulators and the industri are to such a degree attached to each other by expertis and knowledge that they could be one and the same people, hence the revolving door metaphor. The rules become all the more complicated and the entrance for new smaller actors all too costly.

Weakened competition is according to Peltzman a legitimate result of compliance regimes that have been influenced and worked through with incumbents. The introduction of new regulations helps accelerating the evolution in certain areas, including market structure (Peltzman, p.18).

'More intense regulatory and technology requirements have raised the barriers to entry higher than at any other time in modern history. This is an expensive business to be in if you don't have the market share and scale. Consider the numerous business exits that have been announced by our peers, as they reassess their competitive positioning and relative returns.'

From a presentation by Lloyd Blankfein, CEO of Goldman Sachs to the Credit Suisse Financial Services Conference, February 10, 2015.

However one can rightfully argue that the very cause of upper mentioned crises, and in general financial crisis, lay in the fact of reduction in entry barriers. That itself usually is a consequence of deregulations. Instability in financial markets are often caused by structural changes. These in turn are result of deregulations, innovations in finance, new markets or new technologies. All these facts lead to intense competition, increased risk-taking and credit expansion. Hence a fragile financial system that paves the way for elevated systematic risk (Sjögren & Knutsen, p.184).

De-regulation can kickstart a process of structural changes and financial inovations, both new and established financial firms can then offer plenty of risk capital for a low or non-existing interest rate (another outcome of regulators involvement is the central banks deciding over policy rates).

As opposed to Peltzman and Stigler, Sjögren and Knutsen view the regulator (here the government) unaware of all mechanisms involved in the financial sector which makes them unable of fully predicting the outcome of deregulations. But they admit this gives advantage to some actors while taking it away from others, a biased outcome is reality also with this view (Sjögren & Knutsen, p.189). The government is incapable of dealing with the inborn inertia of financial markets, i.e. a delay in reaction to implementation of liberalisation (or for that matter regulations and policy makings. Simultaneously, as long as the consumers and suppliers both benefit from deregulations none of these actors will demand new regulatory regimes.

The public, the financial institutions, the government, including the centralbank, all showing positive attitude in the above scenario blows up the system, neglecting accumulated systematic risks until a small chock can puncture it, resulting in full fledged banking crisis (Ibid.)

A subtle twist to the application of our theory here is that Stigler and Peltzman discuss introduction of regulations whereas Sjögren and Knutsen put forward the disadvantages of deregulations. The latter implies indirectly the importance of regulations for avoiding banking crisis. Furthermore the consumers are not at disadvantage of information bias in the second setting, where they fully take advantage of a liberalised market, and the regulator is not seen as an insider who has the entire information. The dynamics of the financial market put even the regulator at a disadvantage in times of crisis or even before.

What different options are there when a systematic crisis occur? It is inevitably the responsibility of a government to decide between limited number of actions:

- Leaving the responsibility to the financial sector it self. Which would lead to weaker businesses in trouble being taken over by the more liquid ones and others going bankrupt and disappear.
- The centralbank would intervene and act as the saviour, guaranteeing the payment system by increasing the liquidity in the market. I.e. if illiquidity has sparked the crisis.
- Governmental intervention, capable of dealing both with liquidity and solvency crisis. Notabene the difference between illiquidity and more severe issue of insolvency! The intervention above can take many different shapes. The objective here is bringing back the confidence to the market.

So what are the governments objectives of these interventions?

Banks are not surprisingly a vital part of the civil society, their safety and soundness is matter of national concern. Other reasons are to bypass effekts of asymmetric information, to encourage competition in remote areas or to finance socially valuable but financially unprofitable projects (Sjögren & Iversen, p.174). All noble reasons that don't quite resonate with Stigler's theory.

Other voices supporting governmental interventions argue that politics are the ultimate determinant of banking stability (Turner, p.211). If the government is late to take action the contagious nature of a financial crisis can disrupt other rather sound businesses or create severe slowdown in the aggregate economic activity with tremendous repercussions (Grossman, 2010).

Considering the effects of such on the public as a whole makes the public view a rather pragmatic one about the governmental interventions in banking sector.

What is special for the Scandinavian setup is the ability to compromise between public and private interests following an institutional tradition called negotiated economy - usually an important component in these arrangements (Pedersen, 2006). In an international perspective this is an interesting view that leaves out ideologies and party-color dependency in times of crisis (Sjögren & Iversen, p.187).

5.1. The Swedish and Danish banking crisis

5.1.1. Banking crisis in Sweden, part I

Swedish banking crisis in late 1870s followed decades of modernisation and deregulations. There had been radical liberal winds that profited the new innovations in banking. Their existence depended on the state as regulator and policymaker. In return the new commercial banks took an active part in the industrialisation of the country, developing a symbiotic relationship with the growing industri.

A new bank law of 1865 was tailored only for *Enskilda banker* with its expansion in mind. It was a law based entirely on freedoms on behalf of the bank and no demands on behalf of the legislator. Inevitably the rapid uninhibited growth triggered the crisis that followed.

Just a few years before the crisis the Swedish financial system had turned to be much more deregulated and more liberal. Both the state and the banks lost large sums invested on railway bonds. An external chock hit the railroads prosperity (England needed less volumes of iron ore now). The state that initially made an effort bailing out one company stopped its rescue actions when the crisis spread to all other communities in the industri, resulting in a wave of bankruptcies.

The Stockholm Enskilda Bank was hit harder than any other bank by virtue of its more offensive strategies thanks to the customised lawmaking in their favour that set them apart. Liberalisation of the capital markets had made this very bank more fragile than others.

The state came finally to a rescue plan for the banks. The National Debt Office was administrator of a huge fund, where the biggest part was acquired by *Stockholms Enskilda Bank*. This governmental intervention meant an end to financial distress. The role of the state as the lender of last resort was thereby cemented.

On that followed a more rigours control mekanism of banks. This is also the point in time when issuance of notes by private banks was questioned. A central bank aiming to have power over monetary policy ought to have monopoly on issuing notes (Sjögren & Knutsen, p.194).

In these early days of any specific sector as above, it is easy to apply the Economic Regulation Theory by Stigler and confirm some aspects of the theory. Why weren't for example the railroad companies rescued by the state, but the banks? How did *Stockholms Enskilda Bank* establish themselves as a bank that enjoyed more governmental attention? Could it perhaps be for the connections their manager had to the politicians of right kind? André Oscar Wallenberg is f ex mentioned as a radical liberal parliament member (Ibid.) as well as founder and managing director of upper mentioned *Stockholms Enskilda Bank*. But we also need to keep in mind that many dignities from industries were also politicians in that era in Sweden, other examples are Gustaf Peterson and Wilhelm Palmær.

5.1.2. Banking crisis in Sweden, part II

While the Swedish state had slowly started withdrawing from many ownerships by the end of 1980s as a result of the neoliberal waves, a new banking crisis in early 1990s reversed the process. Leaving problems of private and half private actors to the market would go against ideological beliefs in a nation with strong interventionist state (Sjögren & Iversen, p.174).

Failure was caused by among others many new actors in the market, deregulation in interest rates, in currency exchange rates and in bonds, on top of no loan ceiling for banks to apply. This liberal period had followed a thirty year long period of shielded, highly regulated financial sector. In this new era high degree of competition among financial companies in a recently deregulated market led to overheating, but this was only one of many systematic errors (Larsson 2010, p. 213). The submergence of an old system with a new resulted in a historically low price on credit with a following rise in indebtedness for consumers.

The crisis deepened in a serial of events until the government had to step in as a lender of last resort, the central bank, *Riskbanken* not yet being independent from the government (*Rikbanken* has been independent since 1993). The government resolutely guaranteed bank and credit institutions for meeting their commitments. A bank support authority, *Bankstödsnämnden* was established. The support system reminded much of the one from early twentieth century. Both partially state owned banks and smaller private banks in distress were taken over, bad loans made to disappear under governmental funding and the deposits of households and firms were saved by the same. Only in later part of the decade and as a reaction to this crisis a law of deposit insurance was legislated. The process of rescue operations of banks lasted six years, somewhat shorter time than the prior rescue plans in 1870-1920s still.

Nordbanken that had been a state owned bank had been in the eye of the storm during the crisis, causing many of the problems. This led to dismantling of the bank and the state lowering its stakes until finally leaving the now *Nordea* bank entirely to its own destiny in 2013 (Sjögren & Iversen, p.178).

5.1.3. Banking crisis in Denmark, part I

A relatively weak state had fostered the technological, economical but also political modernisation in the early days of capitalism in Denmark. As opposed to Sweden there was no major state ownership of industrial firms to speak of, even the less in the case of financial institutions. Regarding the regulatory processess, the Danish state was late to enter the arena. As we have seen a first banking law came first in 1919. The financial sector in the country remained rather unregulated from its establishment in mid nineteenth century until the 1910s.

Even though the political scene debated the necessity of regulations, following a banking crisis in 1907, it only stopped at governmental intervention and legislation was hindered by the political parties.

There was one curious case where the government had shown extensive efforts in saving one of largest Danish banks, *Landmandsbanken* in the shadow of 1919 crisis. After a very long, complicated and politically sensitive process of reconstructions, the bank was finally fully re-privatised after decades. But unlike the Swedish cases, Danish state did not initiate series of bank ownerships after that period (Sjögren & Iversen, 2019).

5.1.4. Time of stability

Following similar patern as Sweden with restrictive regulations and nationalised banking sector from 1930s to 1980s, a slow process of gradual deregulation started in Denmark. Strict restrictions on lending and interest rates were lifted and new EU banking directives came to play (Sjögren & Iversen, p.181) Worth mentioning is that at this stage Sweden was not a member of the EU.

Not only Sweden and other Nordic countries, but also Denmark was hit by a (minor) banking crisis as after play of higher lending and more risk taking in late 1980s. But the injury was kept to a minimum in Denmark. The crisis, not being a systemic crisis was left for the financial sector itself to repair. According to the Danish centralbank, there were some circumstances that made the crisis milder; The growth pattern of Danish banks was adjusted gradually to the new regulatory changes, not overhyped by the financially liberal era as in the Swedish market. Another fact was that during this period there were major consolidations of Danish banks, taking the number of actors down considerably, where six banks became two. This too was in contrast to the Swedish development. Finally a third fact that definitely sets the Danish case apart form the Swedish one is that a credible fixed exchange rate in the early 1990s meant stable macroeconomic conditions for Denmark (Vastrup, 2009).

For reasons above Danish financial sector only went through a minor turbulence during the early 1990s while Sweden, Norway and Finland all experienced deep crisis for a long period of time.

Following these events the Danish legislation, unlike the others mentioned, remained liberal and market-oriented, unable of inhibiting banking sector of taking higher risks in ways of innovations and credit volumes. This led to Denmark being severely hit but not so much the other Nordic countries (with Iceland as big exception) during the global financial crisis of 2008 (Sjögren & Iversen, p.184).

5.1.5. Banking crisis in Denmark, part II

In the mid 1990s the Danish finance sector went through a massive growth phase. Through internationalisation and acquisitions major Danish banks such as Danske bank were established in other Nordic countries and Ireland whereas other Nordic banks such as *Nordea* were established in Denmark. Lending increased

steadily until 2006 when it peaked at amounts that rivalled the Danish annual GDP. One of the facts escalating the situation had been new legislation of 2003 which made it possible to postpone repayments of loans on property by up to ten years. Stagnated imbalance between loans and deposits made the banks extremely fragile. Another usual suspect playing in was the heavy exposure towards construction and real estate that financial institutions faced Denmark had at that point of time.

The turning point came in 2007. Property markets stagnated as supply outstaged demand, followed by falling prices in real estate and large customers on the property market that couldn't meet their obligations with distress on the most risk-oriented banks (Sjögren & Iversen, p.181).

Up to ten banks one of which was *Roskilde bank*, one of Denmarks ten largest were faced with acute liquidity shortage by second half of 2008. The problem was grown domestically but the financial crisis that expanded in USA accelerated the problems of Danish banks in their access to liquidity in the inter-banking system.

It was clear that the banking sector in Denmark wasn't able of solving the issue themselves as no single actor was capable of taking over the illiquid banks. Faced with reality the Danish government along with *Nationalbanken*, the Financial Supervisory Agency and the organisation of private banks, *Finansrådet*, started a process of discussing measures to ensure financial stability in Denmark.

An 'Stability Package' was introduced that year, with a two year unlimited guarantee on all deposits and unsecured claims and a new organisation, *Finansiel Stabilitet* was placed under the state control and had the objectives of taking over the obligations of problematic banks. The interesting part is that the financing of this institution was entirely upheld by private sector built on an insurance model. It was a part public organisation, placed under ministry of Economic and Finance and part financial holding company (Iversen, 2013).

Danish government went through with another legislation act the following year, to ensure liquidity of Danish banks and to facilitate general access to credit for the entire economy.

Within four years *Finasiel Stablitet* had by the ways of the Danish state taken over 12 banks in the medium and smaller seize range. In total, 56 Danish banks had been provided with the state guarantee to staggering amounts of money. *Finasiell Stablitet* had 500 employees and a balance of 54.5 billion DKK in 2011 (Iversen, pp. 204–205).

Suddenly the Danish sate was more than ever involved in the financial sector. *Finansiel Stablitet* was a political project in aim of consolidating the actors in the sector, working with an array of legal framework all in order to regain financial stability (Sjögren & Iversen, p.184)

6. Discussion

6.1. The role of the state in both countries

The modern times banking crisis of both Sweden and Denmark followed the same pattern. Re-regulations, deregulations and financial booms nurtured new market innovations and expansions, followed by abundance of liquidity, booming credit market, accumulated debts for households and firms ending in financial crisis and finally governmental measures coming to rescue. This pattern is illustrated in figure 1 under definition of banking crisis. Inherit in this pattern is that the state plays an active role in restructuring the finial sector.

Studying the modern time banking crisis in Sweden and Denmark one would find both similarities and differences that have played a substantial role. The governments of both countries, hit by the gravity of crisis were shown to have used an arsenal and combination of interventional methods (Sjögren & Iversen, p.183).

The most radical form of these governmental interventions in both country has been setting up a new organisation with the aim of financial stability where one or more problematic banks come under direct ownership of the state.

Despite Sweden having had a history of state ownership in banking sector and Denmark not having same tradition, their common concern has been to keep the banks as 'going concern'. The concern has thus not been the fiscal costs involved or the governments (short term) involvement in private businesses. Worth mentioning is that the governments involved in crisis of Denmark and Sweden were ruled by liberal conservatives in Denmark and a coalition of right-wing parties in Sweden (until 1994 when Social-democrats took over) respectively, both acting pragmatically with capital injections and state control to mitigate the effects of economic shocks (Sjögren & Iversen, p.186).

Pedersen means that Denmark has a corporatist history which is mirrored in the way the crisis of 2008 were handled. The collectively shared risks after the bank failures shows how a negotiated economy works. The writer elaborates further how this kind of negotiated economy 'entails political and economic processes and relations that are neither strictly public nor private but are situated between public authority and private autonomy' (Pedersen, p. 246). The set-up of *Finasiel Stabiltet* mirrored this institutionalised tradition by trusting actors from private sector to nevertheless execute decisions made in the publics interest of stability and in a state owned institution.

7. Conclusion

In Sweden a turnaround point for the financial sector came about in 1900. This transitional period meant an interesting standpoint for the state. Up until this point in history there had been a reliance on the capital markets to solve their own issues with money supply which they also did to a certain extent. The different actors did rely extensively on self regulation.

At this point in history the immense rise of need for capital due to industrialisation, building activities, investments on infrastructure demanded the attention of legislators. A relatively free market system in the sector could not anymore handle the volumes asked for satisfactory. Thus the Swedish government and parliament regarded it as a question of public organisation.

The new legislative measures were dual in their character, on one hand increased control that limited the dynamics of the market and on the other hand a better secured system for ever bigger and more complex organisations.

These organisations were now given well defined responsibility areas. Commercial banks were in charge of providing capital for industri and trade. Saving banks granted credit for the public and small scale businesses.

Both saving banks and insurance companies were key actors in investing in bonds, issued both by the state, public organisations as well as private companies and other credit institutions. Since their primary task was acting as mortgage institutions for agricultural area and housing, the new regulations obliged them on only investing in secure bonds, deeming their state of stability of higher importance for the actors mentioned above, that is the farmers and the general public.

The state had not only to guarantee depositors and policy holders capitals but also to ensure all too important capital flows. That is how a more authoritative policy was justified, one that had extended public control over financial markets and actors (Larsson 2010, p.180).

In the case of Denmark the banking sector went from having enjoyed a reasonably liberal climate until the winds of change came in 1919 and the parliament legislated for a first commercial bank act. The Danish banking system had until that point had the primary purpose of supporting trade, industri and agriculture. The system constituted a mixed or universal banking model. Until 1920s surprisingly big proportion of industrial investments and growth seems to have come from the companies' own surplus revenues and not through the financial sector, as it is read from a limited primary source on the subject. The Danish banks were hit by quite a number of booms and crisis the years around last turn of century. This is as Hansen argues a primary reason for Danish banking regulations being introduced, as the author puts it 'A close correlation also exists between crisis and prudential regulations in financial sector' (Hansen, p.39).

In both countries of Denmark and Sweden the outcome of the crisis management were similar despite the perception that their historical context of governmental intervention have looked different. As it may be the lastest Danish interventions after 2008 crisis must have been hugely influenced by the Swedish methods of handling the deep crisis of 1990s (Sjögren & Iversen, p.184).

Sjögren and Iversen argue that there really are no alternatives to the bailouts and interventions carried out by the state, since any alternative to these actions would be a worse from an economic and democratic point of view (Ibid., p.186).

Thereby it can be concluded that despite the risk of moral hazards, despite private actors such as individual banks benefiting from these interventions, these measures are taken primarily in the interest of the public and the general economy, a collective matter of the public. Even if we have seen that competition can be set out of order by these actions, one can easily argue that in the onset of a crisis no single actor in the financial market is planning for hostile takeovers or taking advantage of the policy makings, only as affect of these interventions can that happen.

7.1. Future research

After 1990 the substantial growth in number of banking crisis has yielded an array of research concerning causes and consequences of financial instability. However in the Nordic historical context there are gaps in systematic research of regulations in financial sector and lender of last resort operations of the centralbanks during the period of 1870-1930. Studies of consolidations of banks and the aftermath of crisis should also be carried out thoroughly inorder to analyse the consequences on the credit needs of the businesses and individuals as well as the reaction of bank organisation to the crisis itself (Hansen, p.40).

Further observations are also desirable in gaining a solid theory of driving forces behind banking crisis in the special case of integrated Nordic banking crisis 1850-current time. The impact of the many Nordic legislations and the culture itself on the outcome and higher frequency of crisis should be studied further. A comparative study of this region and other highly industrialised countries in the world in this field would also be desirable (Sjögren & Knutsen, p.201).

7.2. Epilogue

A final notion about crisis in financial sector that should be kept in mind:

"... whenever crises occur, the economics profession tends to come up with a new generation model to explain the events, only to find that the next crises do not fit the model." (Capiro, 1998)

8. References

- Brown, Adam R. (2005), On Stigler: The theory of economic regulation, https://adambrown.info/p/notes/stigler_the_theory_of_economic_regulation, Retrived 10.5.2023
- Caprio, C. Jr. (1998), "Banking on crises: Expensive lessons from recent financial crises" The World Bank: Development Research Group, June.
- Fellman, S., Iversen, M., Sjögren, H., & Thue, L. (Eds). (2008). Creating nordic capitalism. The business history of a competitive periphery. Houndmills, Basingstoke: Palgrave MacMillan.
- Fregert, Klas (2022), Historical Monetary and Financial Statistics for Sweden, Volume III, Banking, Bonds, National Wealth, and Stockholm House Prices,1420–2020, Riksbanken,
- George, Alexander L. and Bennett, Andrew. (2004). Case Studies and Theory Development in the Social Sciences, MIT Press, Harvard.
- Grossman, R. S. (2010). Unsettled account: The evolution of banking in the industrialized world since 1800. Princeton: Princeton University Press.
- Hansen, Per H., (1991) From growth to crisis The Danish Banking System from 1850 to the Interwar Years, Scandinavian Economic History Review, 39:3, 20-40, DOI: 10.1080/03585522.1991.10408233
- Hansen, P.H., (1991b) Banking Crises and Bank Regulation: Denmark in the Interwar Period, Papersin Business History. Report from the BHU International Conference, Vol. 8, London School of Economics and Political Science, pp. 1-20,pp. 7-8.
- Iversen, M. J. (2013). Sidste udvej, Finansiel Stabilitet og Danmarks store bankkrise. Copenhagen: Lindhardt og Ringhof
- Jordà, Òscar, Moritz Schularick, and Alan M. Taylor (2016), "Macrofinancial History and the New Business Cycle Facts", in Martin Eichenbaum and Jonathan A. Parker. eds., NBER Macroeconomics Annual 31, Chicago: University of Chicago Press.
- Larsson, M. (1998). Staten och kapitalet. Stockholm: SNS förlag.

- Larsson, M. (n.d.). (2010), The State and the Financial System: Regulation and Regime Change around 1900. In *The Swedish Financial Revolution* (pp. 170–182). Palgrave Macmillan UK. https://doi.org/10.1057/9780230297234_10, Retrived 3.5.2023
- Pedersen, O. (2006). Corporatism and beyond: The negotiated economy. In J. Campbell, J. Hall, & O. Pedersen (Eds.), National identity and the varieties of capitalism: The Danish experience (pp. 245–270). Copenhagen: DJØF Publishing.
- Peltzman, S. (2022). "The theory of economic regulation" after 50 years. *Public Choice*, 193(1-2), 7–21. https://doi.org/10.1007/s11127-022-00996-0, Retrived 24.4.2023
- Riksbanken (2023), Sveriges riksbank 1668-2018, https://www.riksbank.se/sv/press-och-publicerat/riksbanken-play/2018/sveriges-riksbank-1668-2018/, Retrived 10.5.2023
- Sjögren, H., & Iversen, M. J. (2019). The State as the Investor of Last Resort: A Comparative Study of Banking Crises in Denmark and Sweden. *Scandinavian Economic History Review*, 67(2), 171-189. https://doi.org/10.1080/03585522.2018.1557075, Retrived 3.5.2023
- Sjögren, H., & Knutsen, S. (n.d.). (2010), Why do Banking Crises Occur? An Evolutionary Model of Swedish Banking Crises. In *The Swedish Financial Revolution* (pp. 183–203). Palgrave Macmillan UK. https://doi.org/10.1057/9780230297234_11, Retrived 29.4.2023
- Stigler, G. J. (1971). The Theory of Economic Regulation. *The Bell Journal of Economics and Management Science*, 2(1), 3–21. https://doi.org/10.2307/3003160, Retrived 10.5.2023
- Turner, J. (2014). Banking in crisis: The rise and fall of British banking stability 1800 to the present. Cambridge: Cambridge University Press.
- Vastrup, C. (2009). How did Denmark avoid a banking crisis? In L. Jonung, J. Kiander, & P. Vartia (Eds.), The great financial crisis in Finland and Sweden (pp. 245–264). Cheltenham: Edward Elgar
- Ögren, Anders, ed. (2010) ,The Swedish Financial Revolution, Palgrave Macmillan Studies in banking and financial institutions, Palgrave Macmillan, England.